DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
Office of Structural Materials
Quality Assurance and Source Inspection

Bay Area Branch
690 Walnut Ave.St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

Contract #: 04-0120F4
Cty: SF/ALA Rte: 80 PM: 13.2/13.9
File #: 1.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter
Address: 333 Burma Road
City: Oakland, CA 94607

Report No: WIR-025345
Date Inspected: 25-Jul-2011

Project Name: SAS Superstructure
Prime Contractor: American Bridge/Fluor Enterprises, a JV
Contractor: American Bridge/Fluor Enterprises, a JV

OSM Arrival Time: 700
OSM Departure Time: 1630
Location: Job Site

CWI Name: William Sherwood and Fred Von Emmi

CWI Present:	☑ Yes	☐ No					
Inspected CWI report:	☐ Yes	☑ No	☐ N/A	**Rod Oven in Use:**	☑ Yes	☐ No	☐ N/A
Electrode to specification:	☑ Yes	☐ No	☐ N/A	**Weld Procedures Followed:**	☑ Yes	☐ No	☐ N/A
Qualified Welders:	☑ Yes	☐ No	☐ N/A	**Verified Joint Fit-up:**	☑ Yes	☐ No	☐ N/A
Approved Drawings:	☑ Yes	☐ No	☐ N/A	**Approved WPS:**	☑ Yes	☐ No	☐ N/A
				Delayed / Cancelled:	☐ Yes	☑ No	☐ N/A

Bridge No: 34-0006
Component: SAS Tower

Summary of Items Observed:

Caltrans Office of Structural Material (OSM) Quality Assurance Inspector (QAI) Joselito Lizardo was present at the Self Anchored Suspension (SAS) job site as requested to perform observations on the welding of components for the San Francisco Oakland Bay Bridge (SFOBB) Project.

FW Spencer:

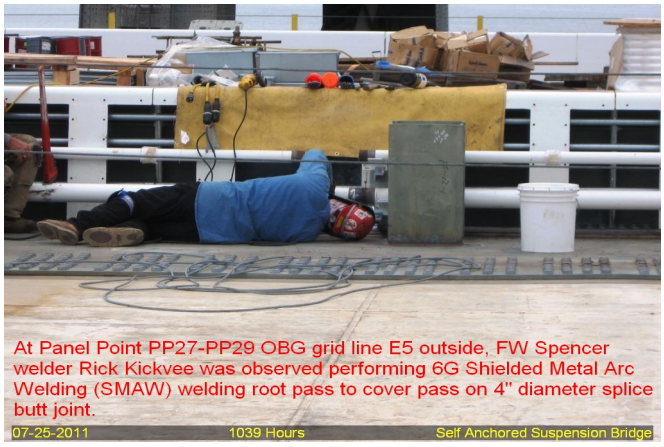
At location Panel Point PP27 to PP29 of OBG grid line E5, this QA randomly observed FW Spencer qualified welder Rick Kiikvee ID-5319 perform Complete Joint Penetration (CJP) 6G (all position) Shielded Metal Arc Welding (SMAW) welding root pass to cover pass on the 2.5" and 4” diameter air and domestic water lines respectively. The system lines being welded are field splices along the grid line of E5 of the OBG. The welder was noted welding the root pass with 3/32” diameter E6010 electrode and followed by fill pass to cover pass using 3/32” diameter E7018H4R electrode implementing Caltrans approved procedure FW Spencer WPS 1-12-1. The welder was noted preheating and removing the moisture of the joint using a portable propane gas torch prior welding. During welding, ABF QC William Sherwood was noted monitoring the parameters of the welder. At the end of the shift, two (2) field splices on each line (2 ½” & 4”) were completed and visually accepted by QC. This QA performed VT verification on the completed weld splices and they appear in compliance to the Contract requirements.

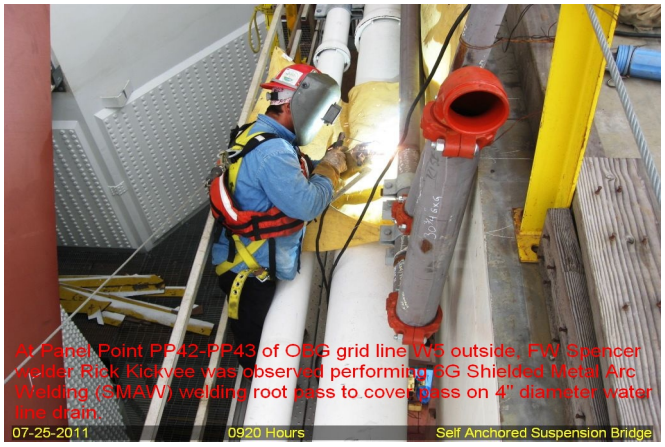
At location Panel Point PP42 to PP43 of grid line E5, this QA randomly observed FW Spencer qualified welder Rick Kiikvee ID-5319 perform Complete Joint Penetration (CJP) 6G (all position) Shielded Metal Arc Welding (SMAW) welding root pass to cover pass on the drains of 2.5" and 4” diameter air and domestic water lines

respectively. The air and water line systems being welded are field welds along the grid line of E5 of the OBG. The welder was noted welding the root pass with 3/32” diameter E6010 electrode and followed by fill pass to cover pass using 3/32” diameter E7018H4R electrode implementing Caltrans approved procedure FW Spencer WPS 1-12-1. The welder was noted preheating and removing the moisture of the joint using a portable propane gas torch prior welding. During welding, ABF QC William Sherwood was noted monitoring the parameters of the welder. At the end of the shift, one drain on each line was completed and was visually accepted by QC.

At location Panel Point PP42 to PP43 of grid line W5, this QA randomly observed FW Spencer qualified welder Rick Kiikvee ID-5319 perform Complete Joint Penetration (CJP) 6G (all position) Shielded Metal Arc Welding (SMAW) welding root pass to cover pass on the drains of 2.5" and 4” diameter air and domestic water lines respectively. The air and water line systems being welded are field welds along the grid line of W5 of the OBG. The welder was noted welding the root pass with 3/32” diameter E6010 electrode and followed by fill pass to cover pass using 3/32” diameter E7018H4R electrode implementing Caltrans approved procedure FW Spencer WPS 1-12-1. The welder was noted preheating and removing the moisture of the joint using a portable propane gas torch prior welding. During welding, ABF QC William Sherwood was noted monitoring the parameters of the welder. At the end of the shift, one drain on each line was completed and was visually accepted by QC.

At OBG 10E panel point PP86-PP87 side plate ‘C’ outside, QA randomly observed ABF welder Xiao Jian Wan continuing to perform fillet and partial joint penetration (PJP) welding in 2F/2G position using Shielded Metal Arc Welding (SMAW) with 1/8” diameter E7018H4R electrode. The welder was noted welding on 2 ¼” wide x 3/8” thick drip plate to the side plate ‘C’ of the OBG. The drip plate and the surface of the side plate (where the drip plate was welded) were noted ground and the paint coating removed. ABF QC Fred Von Hoff was noted monitoring the welding and its parameters. Measured welding parameter of 135 amperes was noted at the time. At the end of the shift, fillet and PJP welding was still continuing and should continue tomorrow.





WELDING INSPECTION REPORT

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Summary of Conversations:

No significant conversation ocurred today.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact SMR Nina Choy 510-385-5910, who represents the Office of Structural Materials for your project.

Inspected By:	Lizardo,Joselito	Quality Assurance Inspector
Reviewed By:	Levell,Bill	QA Reviewer